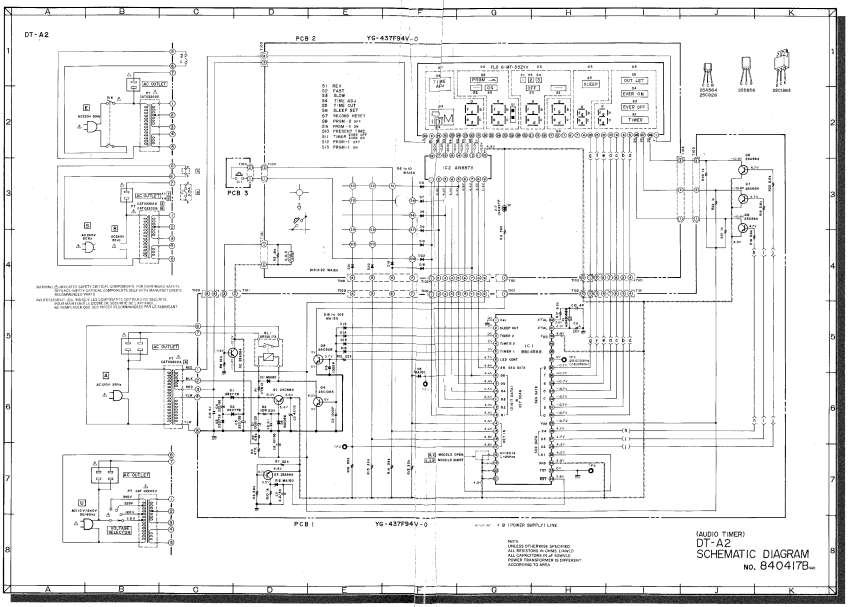IV. SCHEMATIC DIAGRAM